

Title (en)

Turbine with variable inlet section.

Title (de)

Turbine mit regelbarem Einlassquerschnitt.

Title (fr)

Détendeur à section d'injection variable.

Publication

**EP 0056669 A1 19820728 (FR)**

Application

**EP 82200035 A 19820114**

Priority

EP 81870007 A 19810121

Abstract (en)

1. Turbo-expansion apparatus comprising at least one centripetal turbine mounted in overhung manner on the shaft of the driven machine, a duct introducing the fluid under high pressure and terminating in a volute, an inlet sector (2) directing the fluid towards the blades of the centripetal turbine, a duct for the outflow of the expanded fluid, called the discharge cylinder (10), a control annulus (9) concentric with the discharge cylinder (10) and actuating the guide blades (4A, 5A, 6A, 7A, 11A, 12A, 13A) to incline them at a specific angle, characterised in that the turbo-expansion apparatus comprises an inlet sector (2) constituted wholly or partly by guide blades (4A, 5A, 6A, 7A, 11A, 12A, 13A) orientated by guide ramps (8, 14, 15, 16) co-operating with the guide blades (4A, 5A, 6A, 7A, 11A, 12A, 13A) in such a manner that the start of the movement of one blade begins before the total immobilisation of the previously moved blade so that the opening or closing of the inlet sector (2) is effected in accordance with a linear law between the angle of rotation of the control annulus (9) and the cross-section of passage of the inlet sector (2).

Abstract (fr)

Turbine pourvue d'aubes directrices orientables, commandées par servo-moteur, pour adapter la section au débit, variable du fluide. Une ouverture successive et progressive d'aubes de forme spéciale, permet de maintenir à sa valeur optimale la quantité d'énergie récupérée par détente des gaz à haute-pressure.

IPC 1-7

**F01D 17/16**

IPC 8 full level

**F01D 17/16** (2006.01)

CPC (source: EP)

**F01D 17/165** (2013.01)

Citation (search report)

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